

BIRD SAFE

BY GLASPRO

BIRD FRIENDLY GLASS WITH ULTRAVIOLET REFLECTING PATTERNS
FOR RAILINGS, BUILDINGS AND ZOOS



Richmond Ferry Terminal, Richmond, CA
Photographer: Billy Hustace
Architect: Marcy Wong Donn Logan Architects

ULTRAVIOLET REFLECTIVE SOLUTIONS

BIRD-FRIENDLY GLASS THAT IS VISIBLE TO BIRDS

THIS IS WHAT HUMANS SEE



THIS IS WHAT BIRDS SEE



(An ultraviolet flashlight was used in the example on the right, to show the ultraviolet reflective panels that are visible to birds. These images are not photoshopped in any way.)

Collisions with glass claim the lives of millions of birds every year. Birds are unable to pick up clues that windows are present and frequently don't survive impact as they attempt to reach shelter, food and migratory paths reflected in glass. Fortunately, they have a broader spectrum of vision than people, giving them better visual acuity. This is where GlasPro Bird Safe glass with ultraviolet reflective patterns can help prevent bird-window collisions.

According to the American Bird Conservancy (ABC), bird-friendly materials, including glass, are defined as having a threat factor value of 30 or less. ABC uses Threat Factors (TFs) to indicate the relative ability of materials to reduce collisions. Products with lower TFs are considered more effective at preventing collisions. A TF of 30 should reduce collisions by at least 50 percent and is ABC's upper threshold for categorizing materials as bird-friendly.

GlasPro Bird Safe UV glass was tunnel tested by the ABC and earned a Threat Factor of 21, exceeding the standard for effective bird collision deterrent materials. GlasPro Bird Safe, a bird-friendly glass with ultraviolet reflective patterns, can help prevent bird-window collisions while being highly-transparent to the human eye. Birds avoid the glass because they can see the UV patterns.

GlasPro Bird Safe UV glass is proven to effectively deter birds, improve energy efficiency, meet safety standards, and maintain the human visual experience with its high transparency.

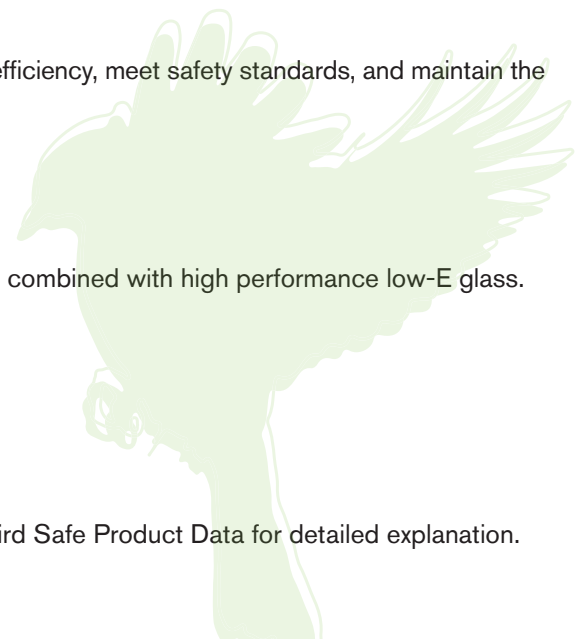
FEATURES OF GLASPRO BIRD SAFE

- Laminated safety glass ANSI z97.1
- Meets the performance standards required throughout North America when combined with high performance low-E glass.
- LEED Pilot Credit 55: Bird Collision Deterrence
- Highly-transparent to the human eye
- Fast lead times
- Made in the United States
- High quality offers extremely long life
- American Bird Conservancy tunnel test. Threat factor of 21. See GlasPro Bird Safe Product Data for detailed explanation.

"In a time when wildlife faces unprecedented, human-driven challenges, we have an obligation to be responsible members of our environment and do what we can to mitigate our impacts on those we share this planet with. That can start with protecting wildlife from deadly collisions with our buildings."

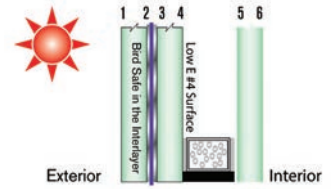
"Including my amendment in HR 2 brings us that much closer to making the Bird-Safe Buildings Act law and would go a long way toward reducing the billions of fatal bird-building collisions that are contributing to the vanishing of America's native songbirds."

- House Representative, Mike Quigley,
author of H.R. 919 - Bird Safe Buildings
Act 2019



HIGH PERFORMANCE INSULATED GLASS WITH BIRD SAFE LAMINATED

Product	Outboard - Inboard Substrate	Appearance	Transmittance			Reflectance			U-Value Winter Nighttime		Relative Heat Gain	Solar Heat Gain Co-efficient	Light to Solar Gain (LSG)
			Visible Light %	Ultra-violet %	Solar Energy %	Visible Light Out %	Visible Light In %	Solar Energy Out %	Air	Argon			
4mm/062 BirdSafe / 6mm Low E / Air Space / 6mm (Coating on the #4 surface)													
SNX 62/27 with GlasPro Bird Safe	UltraClear - UC/UC Clear - Clr/Clr	Ultra Clear Clear	63 59	0 0	23 21	11 11	12 12	51 39	0.28 0.28	0.23 0.23	64 64	0.26 0.26	2.37 2.25
SNX 51/23 with GlasPro Bird Safe	UltraClear - UC/UC Clear - Clr/Clr	Light Blue Light Blue	52 49	0 0	19 17	14 14	14 13	45 36	0.28 0.28	0.23 0.23	56 56	0.23 0.23	2.26 2.14
SN 68 with GlasPro Bird Safe	UltraClear - UC/UC Clear - Clr/Clr	Ultra Clear Clear	69 66	0 0	34 30	11 11	12 12	42 33	0.28 0.28	0.24 0.24	92 89	0.39 0.37	1.79 1.77

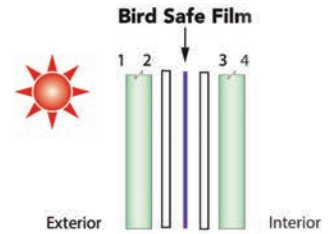


Laminated (Outdoor Exposed Edges Use TPU or SGP)

Ideal for Glass Railings

	AI*	Visible Light	Reflectance	SHGC
Clear Bird Safe Clear	79 - 84	88	8	77
Low Iron Bird Safe Low Iron	79 - 84	89	8	76

* AI is the American Bird Conservancy "Avoidance Index"



NEW GOV. MARIO CUOMO BRIDGE DAZZLES WITH SCENIC OVERLOOKS

Installation of GlasPro Bird Safe helps birds avoid collisions with glass



Fully opened to traffic in 2018, the Governor Mario M. Cuomo Bridge is a three-mile state-of-the-art, twin-span crossing connecting Rockland and Westchester counties in New York. The bridge features the longest shared bicycle/pedestrian path in the nation. In addition to providing a new connection for non-motorized travel, the path — with its six scenic overlooks — offers an exciting and unique recreational experience. Each overlook was designed in partnership with the community and celebrates the rich history of the Hudson Valley. Craftsman Storefronts & Glass, Inc. under the direction of Laufs Engineering Design, turned to GlasPro to fabricate the triple-laminated glass with clear Sentry Glass Plus (SGP) interlayers and GlasPro Bird Safe coating for all six of the scenic overlooks. The 120" x 160" triple-laminated glass panels ensure the safety of bridge visitors, while GlasPro Bird Safe helps to prevent bird collisions with the glass.

Location: Tarrytown, New York
Designer: Laufs Engineering Design
Installer: Craftsman Storefronts & Glass, Inc.

View the GlasPro Bird Safe glass installations in the six overlooks
[Fish & Ships](#), [Palisades](#), [Painters Point](#), [River Crossing](#), [Half Moon](#), and [Tides of Tarrytown](#).